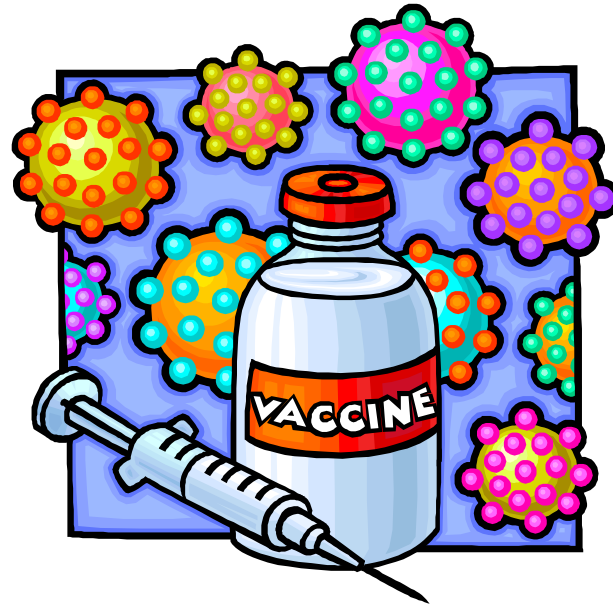


Influence of Occupation and Education Level on Influenza Vaccination Rates Among Employees at Maryland State Treatment and Residential Facilities



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2000/2001 Survey

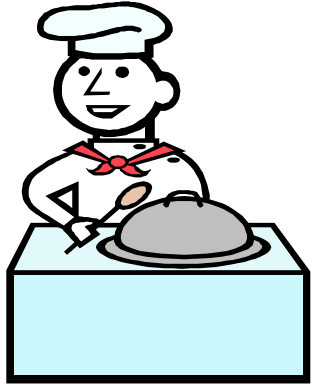


- 18 questions
 - 11 about history of receiving flu vaccine and reasons for and against getting vaccinated
 - 7 demographic questions
 - age
 - job type; patient care work?
 - education level
 - patient care work?
 - # of years worked

Demographics



- **9 of 17 state facilities participated**
- **RESPONSE RATE= 40%**
 - **756/1890 questionnaires returned**
- **Age (all respondents):**
 - Mean= 45 years
 - Median = 46 years
 - Range= (18 - 74 years)



Occupation of Respondents:



– Patient care	364	(51%)
– Administrative	198	(28%)
– Industrial, Maintenance	44	(6%)
– Food Service	19	(3%)
– Other	90	(13%)

Education level of respondents:



– Some or all of high school	162	(23%)
– Some or all of 2 yr college	216	(31%)
– Some or all of 4 yr college	186	(26%)
– Master's Degree	93	(13%)
– Doctoral Degree	22	(3%)
– Other	30	(4%)

Results



- Persons who got a flu shot in 2000: 442 (58.5%)

- Age among VACCINATED:

Mean = 47 years

Median = 49 yrs

Range = 19-74 yrs

- Age (NOT VACCINATED)

Mean = 42 years

Median = 42 yrs

Range = 18 - 65 yrs

Vaccination rate according to occupation group

	RR	p
Administrative	1.26	<0.01
Patient Care	0.89	0.05
Industrial	0.93	0.58
Food-service	0.99	0.95
Other	1.06	0.5

Vaccination rate according to Patient Care Job Type

	RR	p
Physician	3.36	0.05
Nurse	0.98	0.91
Nurse's Aide	0.85	0.56
Other	0.98	0.91

Vaccination rate according to education level

	RR
\leq High School	1.4
\leq 2 year college	1.0
\leq 4 year college	1.25
Master's Degree	2.56
Doctoral Degree	2.85
Other	2.65

Chi-squared Test for Trend = 15.8

p-value = 10^{-5}

If flu shot was given for free...



- Vaccination rate
 - If FREE flu shot= 73%
 - If CHARGED for shot= 33%
- **Relative Risk=2.2**
- **95% CI = 1.9 – 2.7**
- $p < 10^{-7}$

OVERALL CONCLUSIONS OF SURVEY:



In this particular cohort, influenza vaccination coverage was high and employees involved in patient care were no more likely to receive the influenza vaccine than employees who work in administration, food-service, and all other jobs which do not involve patient care.

OVERALL CONCLUSIONS OF SURVEY:

- ★ Higher rates of vaccination were noted among respondents with a higher education level.
- ★ Even the nominal cost of the vaccine may be a barrier against influenza vaccination for some employees. Consider providing the vaccine for free for all facility employees.

Good luck with your flu
vaccination campaign this year!



Any questions?